

# GRIPPER WITH TWO PARALLEL LONG-STROKE JAWS, SERIES GPLK

**METAL**<sup>®</sup>  
**WORK**  
P N E U M A T I C

Dual-acting parallel grippers with either internal or external clamping. The long stroke make them ideal for clamping parts of different sizes or when the clamping fingers are specifically shaped to hold the part. The jaw guide is particularly sturdy and is designed to reduce friction and backlash to a minimum, which is a guarantee of long life. The body is made of hard-anodized aluminium. The jaws are made of high-tensile hardened and ground steel. The pistons are housed in a stainless steel jacket. The end-of-stroke position both on opening and closing can be adjusted using the screws positioned on one side. The grippers come with magnetic or inductive sensors to read the end-of-stroke position. The magnetic sensors are housed in grooves on the side of the body. Inductive sensors are inserted into holes on one side. The side of the body opposite the jaws has a V-Lock profile and grooves. It is advisable to use flow regulators to control the opening and closing speed and prevent end-of-stroke impacts.



TECHNICAL DATA		GPLK-1-30	GPLK-1-40	GPLK-2-45	GPLK-2-60	GPLK-2-75	
Operating pressure	bar					2 to 8	
	MPa					0.2 to 0.8	
	psi					29 to 116	
Temperature range	°C					-10 to 80	
	Fluid	20 µm filtered air, lubricated or unlubricated. If lubricated air is used, lubrication must be continuous					
Clamping force of a single jaw at 6.3 bar, 20 mm from the upper surface, on opening and closing	N	42		116			
Single jaw stroke, adjustable	mm	1 to 15	6 to 20	5.5 to 22.5	13 to 30	20 to 37.5	
Maximum overall stroke	mm	30	40	45	60	75	
Minimum opening/closing time measured at maximum stroke:							
	at 3 bar	s	0.18	0.22	0.44	0.60	0.76
	at 6 bar	s	0.10	0.12	0.28	0.32	0.36
Repeatability (on 100 strokes at constant conditions)	mm	< 0.03			< 0.04		
Moment of inertia around the y axis	kg.cm <sup>2</sup>	3.5	4.4	16.4	21.5	29.1	
Weight	kg	0.44	0.46	1.04	1.12	1.26	
Max. admissible static loads							
Ft	N	7.5			15		
Fa	N	70			120		
Mx	Nm	9			37		
My	Nm	4			23		
Mz	Nm	7			22		

## COMPONENTS

- ① BODY: hard-anodized aluminium
- ② ROLLER: tempered steel
- ③ BLANKING PLATE: blank anodized aluminium
- ④ STOP PLATE: blank anodized aluminium
- ⑤ INTERNAL BODY: steel
- ⑥ PINION: nitrided steel
- ⑦ MAGNET: neoplast
- ⑧ PISTON: technopolymer
- ⑨ GASKET: NBR
- ⑩ RACK: burnished steel
- ⑪ JAW: tempered steel

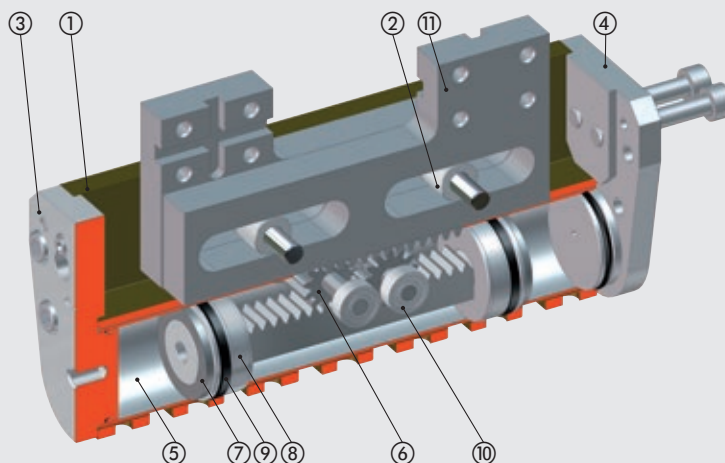
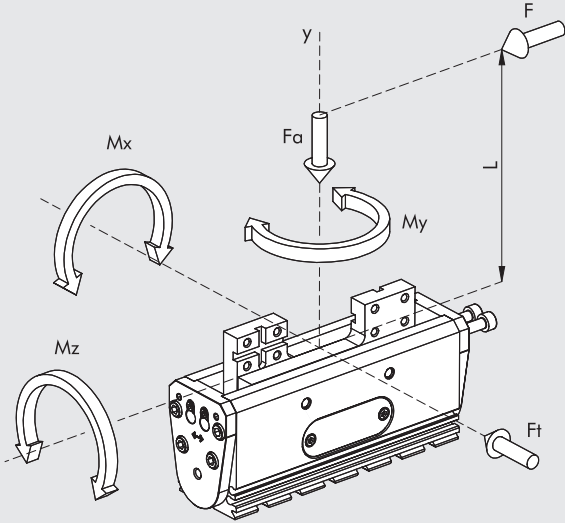
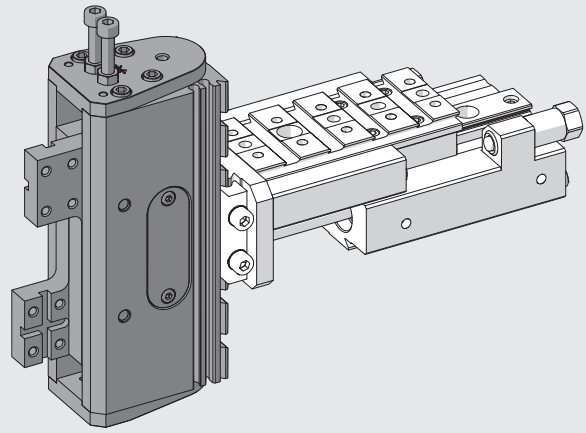
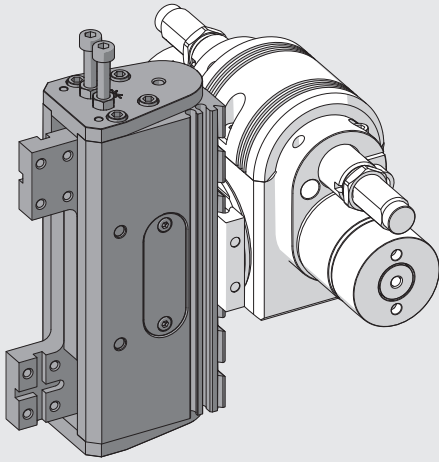


DIAGRAM OF FORCES AND MOMENTS

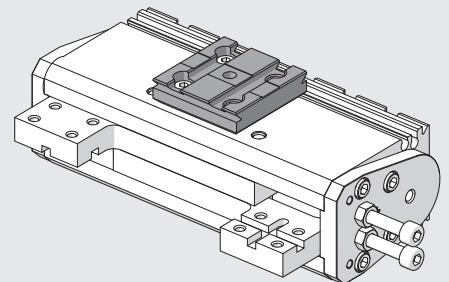
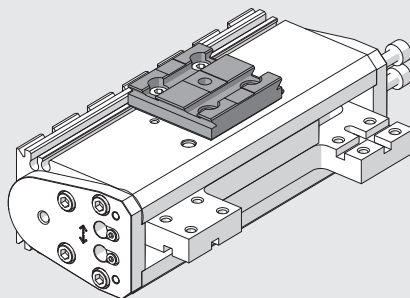
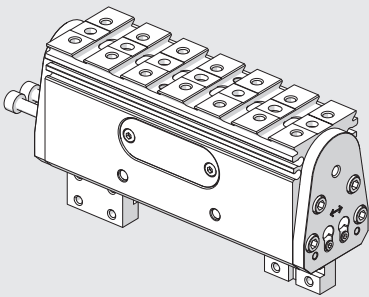


- F Clamping force
- Ft Maximum static traverse force
- Fa Maximum static axial force
- Mx, My, Mz Maximum static moments

EXAMPLES OF APPLICATION



V-Lock MOUNTING OPTIONS



Gripper as supplied

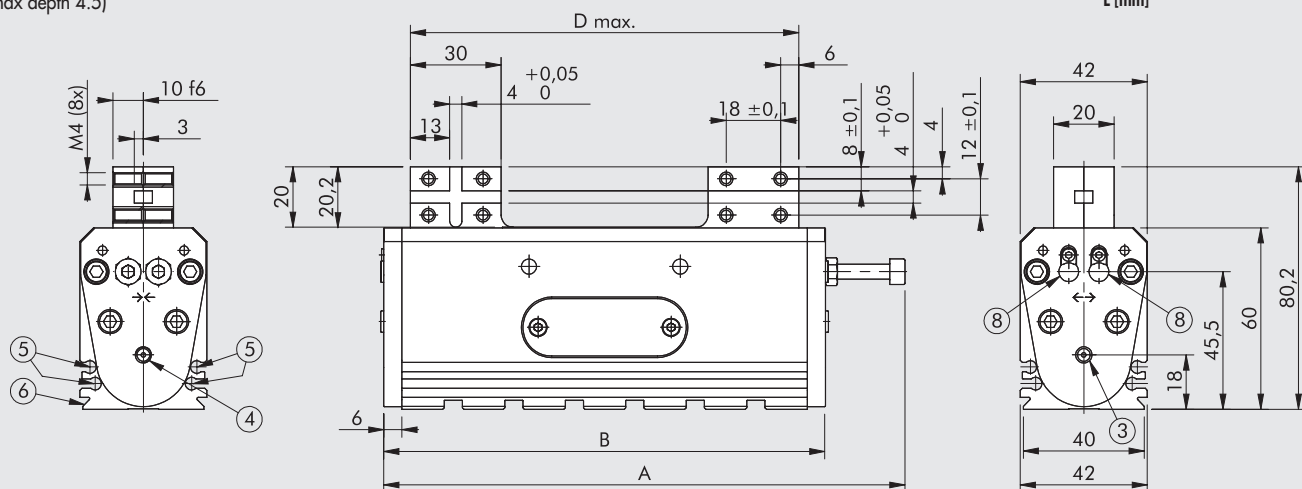
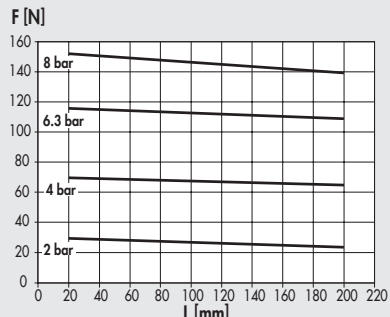
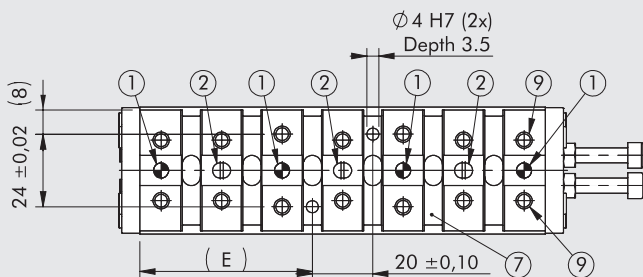
Fix the accessory "type 2 side adaptor" code 0950008004K, lengthwise

Fix the accessory "type 2 side adaptor" code 0950008004K, crosswise

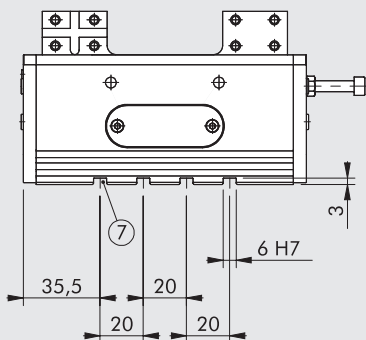
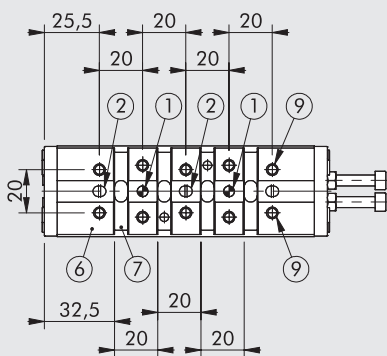


**DIMENSIONS OF GRIPPER GPLK-2**

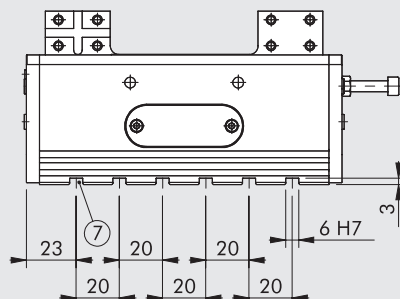
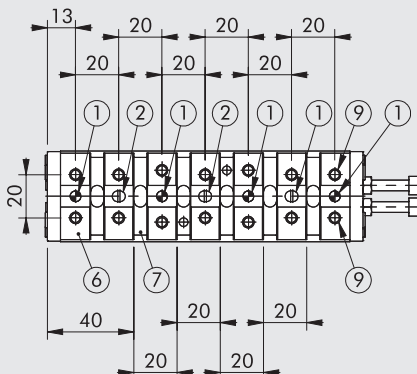
- ① Holes for centring pins (Ø5H7 depth 2.5)
- ② Centring slot (Ø5H7 depth 2.5)
- ③ Gripper opening power (M5)
- ④ Gripper closing power (M5)
- ⑤ Magnetic sensor fixing slots
- ⑥ Dovetail for "V-Lock" fixing. For standard dimensions, see **chapter V-Lock adaptors**
- ⑦ Slot for "V-Lock" precision key
- ⑧ Inductive induction sensor slot
- ⑨ Threaded holes for fixing (max depth 4.5)



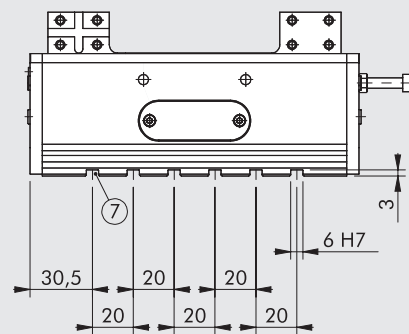
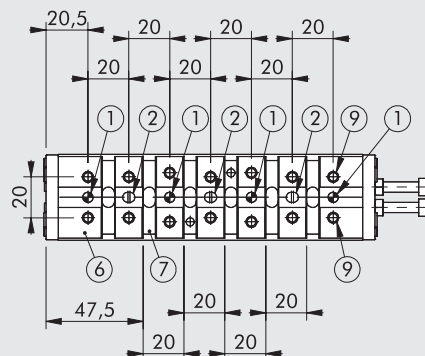
**GPLK-2-45**



**GPLK-2-60**



**GPLK-2-75**



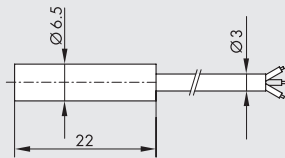
Code	Description	Overall Stroke	A	B	D max	E
K3020450000K	GPLK-2-45	45	157	131	113	49.5
K3020600000K	GPLK-2-60	60	172	146	128	57
K3020750000K	GPLK-2-75	75	187	161	143	64.5

## ACCESSORIES

### V-Lock ACCESSORIES

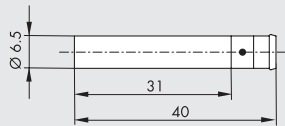
See page A3.36

### INDUCTION SENSOR Ø 6.5



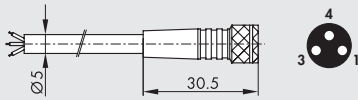
Code	Description
W095K030006	PNP Ø 6.5 PNP inductive sensor with LED 2 m
W095K031006	NPN Ø 6.5 NPN inductive sensor with LED 2 m

### QUICK-FIT INDUCTIVE SENSOR Ø 6.5



Code	Description
W095K030009	PNP Ø 6.5 inductive sensor with push-in LED

### CABLE WITH STRAIGHT CONNECTOR FOR Ø 6.5 PUSH-IN INDUCTIVE SENSOR (MOBILE INSTALLATION)

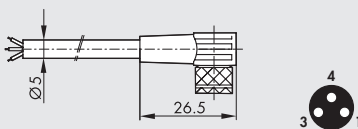


Pin	Cable color
1	Brown
3	Blue
4	Black

Code	Description
02400A0100	M8 female 3 PIN HIGH FLEX CL6 connector with cable L = 1 m
02400A0250	M8 female 3 PIN HIGH FLEX CL6 connector with cable L = 2.5 m
02400A0500	M8 female 3 PIN HIGH FLEX CL6 connector with cable L = 5 m
02400A1000	M8 female 3 PIN HIGH FLEX CL6 connector with cable L = 10 m

Note: Very flexible cables, class 6 according to IEC 60228

### CABLE WITH 90° CONNECTOR FOR Ø 6.5 PUSH-IN INDUCTIVE SENSOR (MOBILE INSTALLATION)

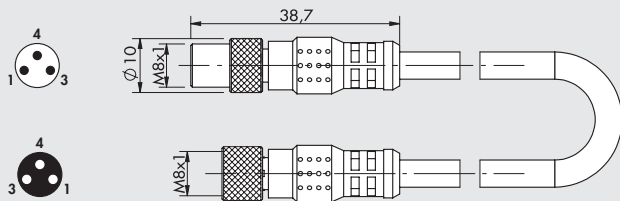


in	Cable color
1	Brown
3	Blue
4	Black

Code	Description
02400B0100	M8 female 3 PIN 90° HIGH FLEX CL6 connector with cable L = 1 m
02400B0250	M8 female 3 PIN 90° HIGH FLEX CL6 connector with cable L = 2.5 m
02400B0500	M8 female 3 PIN 90° HIGH FLEX CL6 connector with cable L = 5 m
02400B1000	M8 female 3 PIN 90° HIGH FLEX CL6 connector with cable L = 10 m

Note: Very flexible cables, class 6 according to IEC 60228

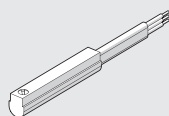
### M8 M – M8 F CONNECTOR FOR Ø 6.5 PUSH-IN INDUCTIVE SENSOR (MOBILE INSTALLATION)



Code	Description
0240009009	M8-M8 3-pin straight connector with cable L = 3 m

Note: Can be used for direct connection to the modules with digital INPUT of the EB 80 and CM valves

### SENSOR Ø 4



For codes and technical data, see [chapter A6](#).

### OIL



Code	Description	Volume
9910490	PARALIQ P 460	80 ml